NEWS RELEASE

Kaibab National Forest





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"Detectives of the Past" conduct workshop with eSMART Summer Camp For Girls

ST. GEORGE, Utah – The North Kaibab Ranger District Heritage staff participated in the 5th annual eSMART Summer Camp For Girls at Dixie State University last week, and gave the girls a glimpse into 11,000 years of stories and human history aboard the Kaibab National Forest as told by the forest and the artifacts found within it. The eSMART camp is sponsored by the local St. George branch of the American Association of University Women (AAUW) and the eSMART acronym means "Exploring Science, Math and Related Technology."

As part of the camp curriculum, Kaibab National Forest archaeologists Connie Reid Zweifel and Britt Betenson conducted a workshop titled "Detectives of the Past" aimed at helping give the girls a basic understanding of the role that archaeology plays in the world of Forest Service science.

"Archaeology has a story to tell," said Betenson. "Generally, the deeper you dig the older the artifacts are, and when artifacts are disturbed it is difficult to tell the story. Artifacts are like words jumbled in a book and when they are disturbed it is difficult to understand the story." During her opening remarks, Betenson talked about her own personal experiences and love for archaeology with the aim of teaching the girls how fun science can be.

As stewards of public lands, the forest service has many scientists who help ensure the nation's forests will be in existence for many generations to come. "Our profession is very unique because as archaeologists we have to use different types of science to understand the past," said Betenson as she explained how biologists, botanists, geologists, chemists, and other scientific disciplines work together toward the common goal of managing the land for multiple uses for future generations, and how understanding the past helps the Forest Service plan for the future.

Betenson shared how she worked with a chemist to analyze residue found on sherds from Paiute pottery vessels as part of her graduate school thesis work, and how they used that analysis to determine that the pots were used to cook seeds, nuts, berries and greens.

During the workshop, additional Kaibab National Forest heritage staff Tanner Whetsone, Chad Hoing and Arizona Site Steward Coordinator and 11-year Kaibab National Forest volunteer veteran, Brad Heap, helped Zweifel and Betenson spark the girl's inquisitive and interpretive minds as they dug together through time in makeshift boxes layered with artifacts. The participants actively engaged in two-way dialogue as they looked at select artifacts under the microscope donated for the workshop by the Grand Staircase Escalante National Monument.

This year's archaeology workshop was especially significant for Zweifel because her daughter Gabrielle had attended the very first eSMART camp in St. George as a seventh grader and returned to help the North Kaibab Heritage staff teach this year's girls that the STEM (Science, Technology, Engineering and Math) subjects can be

fun and lead to a fulfilling and rewarding career.

"I think eSMART has the potential to make a real difference in a lot of girl's lives by showing them that studying science is not too hard or unrealistic of a goal. eSMART helped me realize that I can succeed in any field if I put my mind to it," said Gabrielle Zweifel, now a senior at Kanab High School. "eSMART really tries to show girls that a career in science is a very real option for them and one that would be both beneficial and fun." Currently, Zweifel aspires to pursue her a degree in the field of astrophysics or exobiology, and most recently she attended this year's Utah State Engineering Sumer Camp at USU.

In addition to the archaeology workshop, the girls also took part in many other STEM-related workshops, which included classes ranging from statistics, to crime-scene investigation, chemistry, creative computing, the study of DNA, and even comets.

By design, the workshops were taught by professionals from all walks of the STEM community, and mostly by women from Utah or Arizona who are at the top of their respective fields in order to leave the girls feeling empowered to pursue whatever course of study they choose.

"I work for Planetary Science Institute (PSI) but my funding actually comes from NASA. I worked at the Jet Propulsion Lab for over 30 years before moving to St. George and transferring to PSI. In all those years, I have loved every day of coming to work - and my hope for the girls at the eSMART camp is that they will end up in careers that they enjoy every bit as much," explained Candice Hansen, Senior Scientist at the Planetary Science Institute, a Nonprofit 501 (c)(3) Corporation in Tucson, Arizona, who taught an eSMART workshop on comets and constructed a comet nucleus made from mud and dry ice. "The girls really enjoyed watching the nucleus hiss and steam. After that they did a little craft of making a comet."

"We hope to inspire these girls to find and embrace their love for science and math," said camp director Gloria Prahl. "We are not graduating girls from college in the Utah and are currently ranked 50th in the nation. Our goal is to encourage them to go to college, to stay in college and to graduate from college. In the STEM subjects, women may earn higher salaries. It's the best we can get paid. Utah has a great need for that sort of thing as does our nation."

Through the mantra of advancing equity for women through advocacy, education, philanthropy and research, the local St. George branch of the American Association of University Women (AAUW) started this eSMART STEM Camp for local seventh grade girls in 2009. Partnered with Dixie State University, AAUW has successfully reached several hundred girls in the last 5 years with the support of private donations from both Kane County and Washington County residents, the Center for Education, Business, and Arts (CEBA), and the North Kaibab Ranger District.

The eSMART camp mission is to encourage these girls to explore science, technology, engineering and math related subjects and to reach high in pursuit of their academic aspirations so they can be anything they want to be.

For information about next year's eSMART Camp, contact Gloria Prahl at gmp@infowest.com or (435) 674-2824. Additional information can be found on the AAUW-St. George Facebook page or at http://stgeorge-ut.aauw.net/.

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North Kaibab Ranger District Archeological Technician, Tanner Whetstone, teaches the eSMART campers how to make a split-twig figurine using a pipe cleaner. Split twig figurines are found in the Grand Canyon region and may be as great as 5,000 years-old. Some of the effigies give the appearance of bighorn sheep and mule deer.



North Kaibab Ranger District archaeologist Connie Zweifel and her daughter, Gabrielle Zweifel, help eSMART girls dig through time in makeshift boxes layered with artifacts.